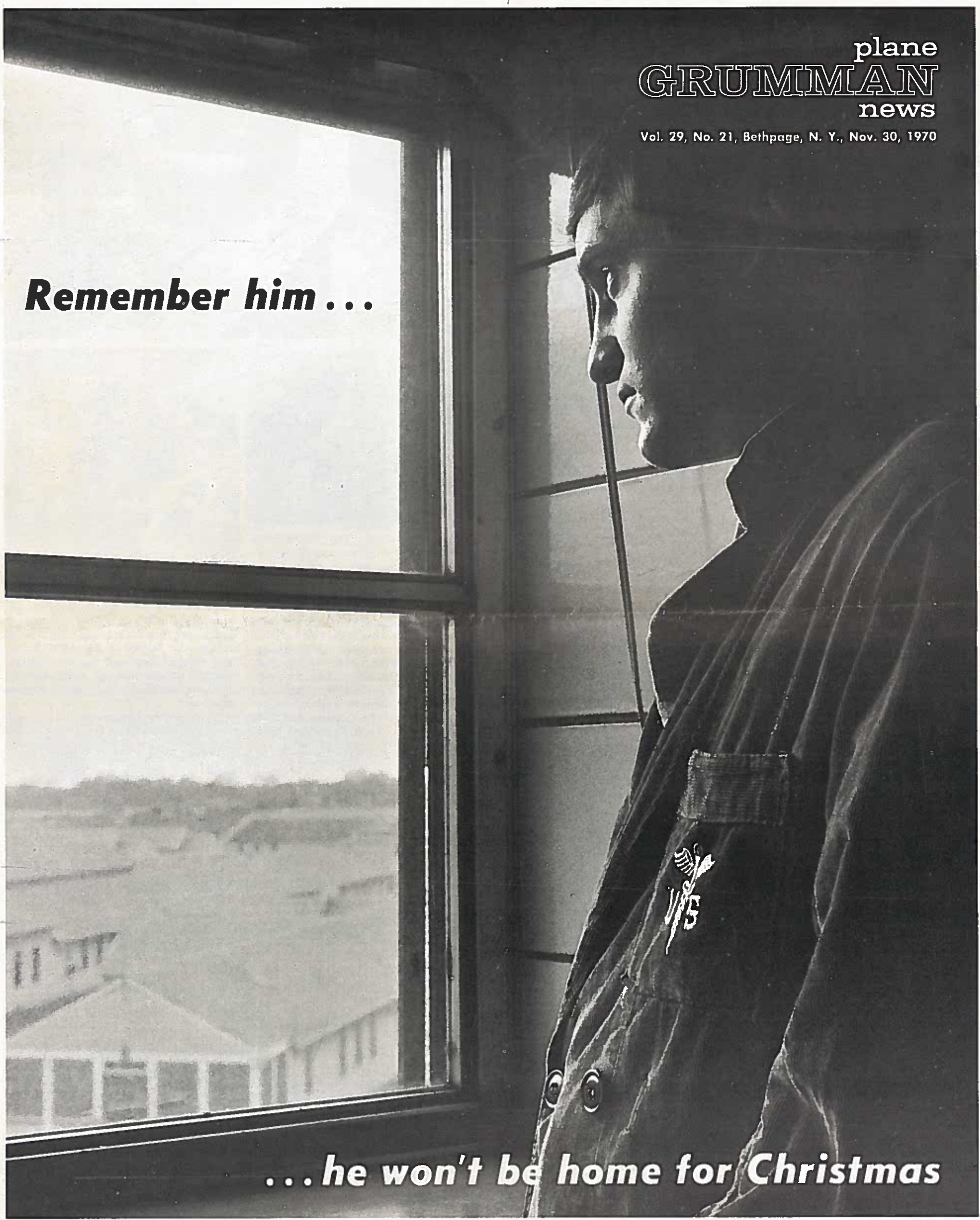


Joe A.

Remember him...

...he won't be home for Christmas



Flight acceptance team preps for F-14 first flight

The F-14 will make its first flight in December.

Then the Navy's air superiority fighter begins the rigors of flight testing. And that testing—from first flight to Board of Inspection and Survey (BIS) trials—is to run just 17 months, or half the time it used to take to do the same tasks.

"The theme of first flight to BIS in half the time," says Lou Edwards, director of Flight Acceptance, "has been the flight test challenge since the F-14 proposal was submitted. To make this a reality Grumman has developed and groomed a complex flight test system to support the F-14 and our other programs. This flight test system, like any other tool, is only as effective as the people who use it—in this case, a close-knit, hard-charging Program team supported by the Flight Acceptance Department."

An important center of "rehearsal" activity has been the ATS (Automated Telemetry System) centered about the new Grumman Data Systems ground station under the direction of Ray LeCann. This advanced test data system just finished its development cycle in early October and will play a key role in making that "17 months to BIS" goal a reality.

Test on ATS

The ATS itself has gone through some four-to-five weeks of testing, an in-flight "screening" job accomplished by using an A-6A. In a sense, A-6A No. 55 has simulated the F-14, a bird that's yet to fly. Carl Locker of Instrumentation Engineering in Plant 7, where the first F-14 is being readied for flight, puts it this way:

"You're flying an Intruder but you're 'seeing' the F-14."

That sounds like magic, but it isn't. What's been done is fairly simple in concept. Old 55 has been bedecked with the two different telemetry transmitters

as will No. 1 F-14. The basic job then was to find out how well the ATS, a passive earth-bound system, could pick up and digest data from an aircraft in flight. In short, could ATS do the job?

"As with any new system," says Tom Kastner, ATS Program manager, "you expect to have some bugs. Perfection doesn't come instantaneously. We began by correcting the gross anomalies first, and as we moved along we continued to de-bug the system. Now we're fine-tuning it and are confident it will do the job."

Performance checks

Some 50 people—about 20 in Flight Acceptance and 30 in Grumman Data Systems—had a direct hand in developing and testing the ATS.

As with any other flight-test plan, at least three basic questions are involved:

- Is the aircraft in proper configuration to execute its prescribed maneuver?
- Did the aircraft perform its maneuver satisfactorily?
- Is it safe and desirable to proceed to the next test point?

Checking on these performance guides is a group headed by Dick Orr, who is test conductor for A-6A 55 and F-14 No. 1. "We've been exercising the ATS to see how 55 performs against it," says Orr. "As 55 flies, antennas track the plane's flight and signals are microwaved to the ATS, where the consoles and recorders display the flight in real time. The ATS people, of course, are in voice contact with the flight crew. It's much like what occurred during the space missions."

So when No. 1 F-14 flies, the ATS will be proved out and in position to accept the data flow on such critical flight processes as stability and control, structural loads during maneuvers, flutter (vibration), inlet compatibility, propulsion and performance tests, systems evaluation, and so on.

Readying No. 1

While "No. 1" is being readied for flight, all elements concerned with its future test program have been receiving their own checkout in the form of a comprehensive "F-14 Service Testing Program." This program has been a small flight test program in itself. An A-6A airplane was instrumented to simulate the F-14 and a series of nine test missions were flown to exercise all features of flight testing that will be used for the F-14.

In all cases personnel participating in this rehearsal have been the same people who will be on the job when "No. 1" takes to the air. The Company's prime and back-up test air crews, Chief Pilot Bob Smyth, Bill Miller, Don Evans, and Chuck Sewell, have been flying the A-6 55 in its simulated missions. And all elements have been duplicated: F-4B high speed chase aircraft, A-6 tankers, weather flights, helo rescue standby, etc. Red Hafter, team manager for F-14 No. 1, amplifies on what's been going on: "A-6A 55 flights, with accompanying chase and tanker, duplicate as far as



(Photos by Ed Finnicks and Dick Sander)



possible what we will be doing to test and support the F-14. We're polishing support and operating procedures. Everyone from the weatherman to instrumentation plane followers has been included."

From the standpoint of fabrication, Joe Cipp and Frank Leone, who're overseeing production and final assembly, say that No. 1 is about ready. "It's taken a hell of a lot of hard work by lots of guys who know their business. All of them knew they could do it, and every one of them has pride in what he's done," says Leone. "These guys are dedicated."

"There's a chain of testing ahead," says Joe Hannan, Flight Test manager for the F-14. "No. 1 is tagged for high-

speed and flutter tests. No. 2 will be used for low-speed flights, mainly stalls and spins. The structural aircraft is third, and the fourth and ninth go to Hughes for testing of the AWG-9 missile system. Five and six are 'full-up' aircraft that include all electronic systems and will be used for flight demonstrations."

Hannan went on, identifying the particular roles assigned for each aircraft, and when he got to number 17 he smiled: "That's the first production aircraft. It's the end and the beginning, the end of test-proving and the beginning of F-14's life-purpose, action with the Fleet."

About the cover . . .

The loneliest place at Christmas is a hospital bed far from home and family. To cheer up Vietnam servicemen at one of the military hospitals, two young ladies from the Navy Office in Plant 35, Jo Grimaldi and Elaine Montaperto, have arranged to visit before the holidays with some gifts from Grumman and the Navy Office personnel. December 11 is deadline date.

You can help. ESO has placed boxes in lobbies and cafeterias. Some suggested gifts are games of chess, Chinese checkers, "Stocks & Bonds," cribbage boards, playing cards, paint-by-number sets, intricate hobby kits, toiletries, ties, shirts, robes. For information, call Jo on Ext. 1334. (Photo by Fred Annette)

Vibration tests

Critical around-the-clock Ground Vibration Survey (GVS) tests on the F-14 are progressing at Plant 7, Calverton.

"Before the F-14 can fly," says Frank Campo, group leader, F-14 Engineering Test, "we must complete these tests. That's how important they are. So far they're good."

GVS tests are designed to simulate what happens to wing and tail and fuselage areas during flight. A certain amount of bending and twisting of the wing and tail sections is inevitable; the point of the tests is to make certain that those actions are within specified limitations.

To conduct GVS tests the entire aircraft hangs on a two-point soft suspension system from the hangar ceiling. Eight shakers on the production floor extend upward to parts of the wings or tail, or both, and supply the required amount of vibration. Usually only two shakers are used at one time, although all may be exercised.

Since the F-14 is a variable sweep-wing aircraft more shaker tests are needed than would be the case were it a fixed-wing plane.

Gene Martone and Charlie Squires are test directors, and the test conductors are Mel Cornwell (days) and Jim Gusso (nights). From 20 to 25 people are on the job, many reading computerized data of what's happening to the vibrated plane.

Myers sees U.S. approaching critical point in space budgets

There is some question as to whether the United States can maintain a viable and productive space program if further budget cuts are made in the program.

This thought was one of many voiced recently by Dale Myers, associate administrator for Manned Space Flight, NASA, during a press conference and later speech before members of the Long Island Association in Garden City.

In setting the scene for space work, Myers alluded to how we stand today:

- About \$6 billion was allotted to space in 1966 and the outlook for the coming fiscal year is roughly half that amount

- Of six planned manned space missions two have already been scratched, leaving but two for 1971 and two for 1972

- Under the present schedule, there will be a four-year period when no Americans will go on space flights

- And "the Soviet rate of launching is increasing even while ours is decreasing"

Near rock bottom

So, as Myers sees it, the U. S. is "just about at rock bottom" as far as funding for space is concerned. If anything, more funds should be funneled into the space effort—and for the very practical reason that it has paid off. "Throughout our industry," Myers said, "we see thousands of new techniques, new processes, new services, new products, and a great number of whole new companies formed to provide these goods and services."

He mentioned some yields from previous American space efforts: a very favorable "balance of trade in aerospace

and computer sales" abroad "a great advance in the techniques of management of very large technological enterprises," satellite communications—international TV, new computer-controlled transmission systems world-wide in scope, improved weather forecasting, "medical treatment and hospital automation," and educational techniques. And he made special reference to the Orbiting Astronomical Observatory (OAO), calling it "the most sophisticated unmanned spacecraft ever built in this country."

With that solid record of achievement as a foundation, Myers said that a special task group had presented the President with "a balanced new space program as a continuing part of American life."

"We have now laid down our space program for the 1970s. This, then, is the program: continued exploration of the moon, exploration of the planets and universe, reduced cost of space operations through use of a reusable space shuttle, extended capabilities for man to live and work in space, major emphasis on practical applications, and greater international cooperation."

In terms of moon missions, Myers sees the last three Lunar Modules as landing in more difficult areas, staying there longer, carrying more scientific instruments, and using a "roving vehicle that will enable the astronauts to explore 20 times as much area as they could on foot."

During the press conference, by the way, the issue of manned vs unmanned vehicles had been broached, and Myers' vote was cast emphatically in favor of manned missions. Unmanned missions, he said, are "too limiting;" it is "man's judgment that brings best results. He



Working model. Dale Myers and fellow-NASA man Robert Littlefield examine electron-beam welding on F-14 titanium part with Tom Main, director of Materials and Processes. (Photo by Harry Prodromides)

can look and inspect what should be brought back."

Then, in his address, he talked of "Grand Tour" missions. These, he said, would "take advantage of a rare lineup of the planets that will permit the use

of a billiard-ball technique to carom spacecraft off the gravitational field of Jupiter and on to the outer planets of the solar system. These will include missions to Jupiter, Saturn, and Pluto launched in 1976 and 1977, and in 1979 on a nine-year flight to observe Jupiter, Uranus, and Neptune.

"For exploration of the universe, the principal new feature . . . will be the development of a new manned High Energy Astronomy Observatory to obtain high quality data on the stars and galaxies far beyond the reaches of our solar system."

Myers sees ecology as a fruitful area of study, one in which the space age has enabled "man to examine and measure the earth as an entire planet, avoiding the laborious and often the impossible tasks of assembling bits and pieces of information simultaneously from all over the surface. Probably the most important contribution that can be made by observations from space is to determine whether the basic cycles of the earth's biosphere are being disturbed by human activity, and if so, how much."

The possibilities in that and related areas, he indicated, are enormous. So, too, are advanced technology programs involving communications and weather phenomena. And he said that "NASA plans to participate in the Global Atmospheric Research Program, an international cooperative research program designed to increase the understanding of the general circulation of the atmosphere, so as to improve further the reliability, to extend the range of, weather forecasting."

(Continued on page 8)



Bethpage visit. During a world tour that tied in with the 25th anniversary of the founding of the United Nations, Lee Kuan Yew, Prime Minister of the Republic of Singapore (L), made a tour of Grumman. Here he talks with (L to R) Dr. Tom Cheatham, President of Grumman International, Chan Chin Bock, director of the Economic Development Board, George Lambert of Training, and President Lew Evans.

Sciascia, Peckham collect top Art, Photo honors

If there has been a better Art and Photography Show in the history of this GAA-sponsored event, it must have been fantastic.

"The quality of this show is magnificent," said Mrs. Lenny Wuchner, one of the three who judged the art side. Her fellow judges, Mrs. Monte Belden and Neil Fogel, expressed similar views.

And when it came to photography, the same sort of enthusiasm was evidenced by judges Alexander Ferguson, Alvin Friedman, and William Joyce. In fact, the judging in most categories was so difficult because of the entries that the allotted time had to be extended by some 45 minutes.

Yet, with all the beautiful work to choose from, selection of the Grand Prize Winners turned out to be surprisingly easy. The choices were unanimous in both cases.

Sal Sciascia's painting of hay in a barn was so realistic that Mrs. Belden said "you feel you could walk right into it. The detail is marvelous, and the light has been handled very, very beautifully."

Fogel lingered at it for some time, studying it appreciatively. "It has almost everything you look for—it's pleasing to the eye, it's accurate, it's well perceived, and it's consistent in all its parts."

"I'm very happy about winning," Sal said. "The painting's of my father-in-law's barn. I did the underpainting first and then added transparent glazes to accentuate light and depth." The How and the Why? Said Sal, "If you can analyze what it is that makes something

look good, then you can paint it."

At least Sal can!

Many others were working their own little miracles of creativity winning first prizes in 11 different categories. And there were repeaters—Sciascia and Vin Skittone pulling down two each.

Photo in the park

The hands-down winner of the Grand Award in photography went to Frank Peckham for his sensitive treatment of an age-creased Negro in Greenwich Village. "I just happened to come across him in the park," said Peckham, "and I had a telephoto lens with me. I was several feet away when I took the shot. I don't think he was ever aware that I had focused in on him."

"Why him? Well, I noticed how intent he was watching the children play. His expression was what I was after. There was so much strength and character in that face!"

It showed, brilliantly, in Peckham's shot.

In viewing so much material that obviously deserved recognition, the thought had to come: What do judges look for when they make their selections? All seemed to agree, whether they were assessing paintings or photographs or sculptures, the matter of choosing one over another was basically subjective; yet, granting that, there were standards — however difficult to measure with precision—that controlled the choices. Impact, texture, composition, honesty, and quality emerged as the touchstones.

"I guess what it really amounts to,"



Photo study. Frank Peckham, Grand Award winner in photography, explains to admiring lady how he came upon the shot and what he was looking for. (Photos by Nat Scherer)

said Joyce, "is how strongly a piece draws itself to you. If it's something that you want to look at time and time again, if it's something that brings you to see some new part of—something you missed before—then it has to be good."

Fogel added another criterion, one more applicable to the world of painting:

"Most work that's viewed from afar and seen as great can be put to another test. If you move in, close, and see more, well, that artist has created a truly great picture."

As for abstract art, Friedman's gauge was thematic. "An abstract has to have a theme, a compelling theme. It has to be more than random structures."

That there was an unusual amount of art and photography on display that fulfilled the criteria mentioned by the judges was attested to by Mrs. Wuchner: "There is so much beauty here! It's wonderful. In a way, it's a shame, too, because there was so much of real merit—and some of it placed in the wrong category—that fine work wasn't rewarded with a prize."

John Carr, Vice President and General Counsel of the Grumman Corporation, presided at the awards ceremony, in which each of the Grand Award winners received a \$100 bond. Winners, by category, were:

ART

OIL, PLASTICS, ACRYLICS

Landscapes—Fred Vitelli (1); Vincent Skittone (2); Bill Christ (3)

Seascapes—Pat Aronna (1); Peter Ivy (2); Robert Ketcham (3)

Non-Objective, Abstract, Etc.—Chris Certain (1) Figure, Portrait—Bill Christ (1); George Haraden (2); Charles J. Pinkham (3)

Still Life—Vincent Skittone (1); Herman Friedman (2); Peter Ivy (3)

Nature—Joe Gurney (1); Richard Wiesner (2); Denise Schmid (3)

WATERCOLOR—Ed Wimmerstedt (1); Howard Fraser (2); Susan Fuchs (3)

PASTELS—Vincent Skittone (1); Bruce A. Gilham (2); Frank J. Packy (3) BLACK & WHITE, GRAPHICS, ETC.—Sal Sciascia (1); Alan Davis (2); Louis Fasano (3) SCULPTURE—Paul W. Hookey (1); Walter Nazimowitz (2)

PHOTOGRAPHY

MISCELLANEOUS—Sal Sciascia (1); Martin Godofsky (2); Frank J. Packy (3)

BLACK & WHITE PRINTS—Frederic Trinkle (1); Frank Peckham (2); Neil Marcus (3)

STILL LIFE—Harold Wicker (1); Neil Marcus (2) PEOPLE—Frank Peckham (1); Frederic J. Trinkle (2); Louis Smolenski (3)

ANIMAL—Frederic J. Trinkle (1); Neil Marcus (2); Arnold R. Johnson (3)

HUMAN INTEREST—Arnold R. Johnson (1); Frank Peckham (2); Jean G. Pallet (3)

ABSTRACT—Frank Peckham (1); Harold Dunayer (2); Neil Marcus (3)

MISCELLANEOUS—Arnold R. Johnson (1); Tom Dong (2); Stephen Vogt (3)

COLOR PRINTS

SCENES, NATURE—Daniel Zee (1); Charles R. Belensky (2); Al Chernick (3)

STILL LIFE—Charles R. Belensky (1); Don Rusch (2)

PEOPLE—Gardner Lorimer (1); Daniel Zee (2); Don Rcsch (3)

ANIMAL—Frank A. Baldi (1); Herbert G. Denaci (2); William D. Craig Jr. (3)

HUMAN INTEREST—Donald C. Carter (1); Herbert G. Denaci (2); Charles R. Belensky (3)

MISCELLANEOUS—William D. Craig Jr. (1); Joseph A. Stiebler (2); Robert W. Messler (3)

COLOR SLIDES

SCENES, NATURE—William Downey (1); Louis Smolenski Jr. (2); Hermine E. Kelley (3)

STILL LIFE—Tom Dalton (1); Jerry Wachtel (2); Paul J. Dillon (3)

PEOPLE—Bill Barnard (1); Mary Mandala (2); Joseph A. De Clemente (3)

ANIMALS—Peter Wolmann (1); David J. Hanocka (2); Ed Fischer (3)

HUMAN INTEREST—Richard Kruszewski (1); Charles Belensky (2); Robert Hughes (3)

ABSTRACT—Jerry Wachtel (1); Tom Dalton (2); Charles Belensky (3)

MISCELLANEOUS—George Haddad (1); Jerry Wachtel (2); Walter Demchuk (3)

SNAPSHOTS—Dolores B. Stirle (1); Mary Mandala (2); Katherine Eng (3)

GRUMMAN, November 30, 1970



'Walk right in.' That's what one of the judges at the Art and Photography show said about the beautifully realistic painting by Sal Sciascia, scanned here by John Carr, Vice President and General Counsel of Grumman Corporation.

Test engineer at KSC turns 'simple idea' into bond jackpot

"Why didn't I think of that?"

That comment—along with some grinding of teeth—probably jumped to the lips of thousands of people at Grumman recently when they heard how easy it was for John Pierini, Lee Dubey, and Wes Wessel to make a healthy profit out of keeping their eyes

Holiday special

What some people won't do for a bargain!

Last July, Charlie Solarski and his cohort in the Suggestion Office in Plant 5 were bemoaning their fate. After all, August was just around the corner, and they knew from long experience that August, although a great time for vacations, was just awful for the suggestion business.

What to do?

Zingo. Why not have a special offering to encourage people to turn a "dead" month into a "live" one? Charlie and his associates did just that. They decided that people who submitted approved suggestions during August would receive double the Flight Shop certificates they normally would get during any other month. With these certificates they could obtain drinking glasses, travel bags, jewelry accessories, and many other attractive gifts.

It was a tremendous success. Over 300 suggestions arrived at the Suggestion Office during August. It was a 70 percent increase over August of '69 (and established an all-time record for the month) and a 77 percent rise over the previous month. It also proved that Grummanites know a bargain when they see one.

Hold it—that's not the end of the story. With December, another normally slow month, looming ahead, why not try the double offering again, and call it a "holiday special" this time.

So, here's another chance for you to show that most people still know a bargain when they see one. Go to the nearest Employee Services Office, see what's being offered in the Flight Shop, then pick up an Employee Suggestion form.

It could mean savings to the Company; it could mean a choice of attractive items displayed in the Flight Shop; and it could mean a lot more—valuable Savings Bonds, for instance, and the knowledge that your talents and experience are benefitting in a special way all the people at Grumman.

Sound corny? Maybe so. But try it out, and see how you feel then.

open. And speaking up at the right time, of course. It was that simple.

Take John Pierini, for instance. John is an engineer in the LM Guidance and Navigation section at Kennedy Space Center. He came up with an idea to provide 24-hour coverage on a critical system in the Lunar Module, and do it with half the effort it used to take for the same task. And it all started with a makeshift alarm system he had set up at home. Sound preposterous? Not really.

From the first fire-up of the system at Bethpage to eventual launch at the Cape, the LM inertial measuring unit's glycol temperature had to be monitored around-the-clock. A temperature drop (indicating a power loss) would set off an alarm to alert technicians to a potentially damaging situation in the unit.

This continual monitoring was costly: besides the person assigned to the job, there had to be a back-up or relief man for those times—lunch, for example—when the regular man might be away from the area. Premium pay for holidays and weekends boosted the total cost even higher.

'Very simple'

Pierini was almost inclined not to even submit his idea for a suggestion award. "It was a very simple idea," he says. He had solved a similar problem at home—although it was of a slightly different nature—with a rather innovative hook up. When visiting neighbors next door, John and his wife had found that by placing an open phone line next to their child's bed, connected with the neighbor's phone, they could be alerted to any cry or other sign of discomfort from the baby, and be home in a flash to remedy the situation.

Would it work for LM? It not only worked, it worked well. An open phone line, with several amplifiers situated in key locations in the building where the LM vehicle was being checked out, would provide instant communication for a blaring alarm. Although a man was still required to perform regular monitoring, the open phone filled in as a back-up just in case the person monitoring the system was called away. The need for a relief man was eliminated—and so was all that costly overtime.

The system was in use for a year. Now the National Aeronautics and Space Administration has changed its requirements on the tests—a roving guard acts as monitor, and should there be an alarm signal he would inform technicians of the problem. It's likely that John's idea may have hastened a change in that procedure, too.

It was the first suggestion Pierini has ever submitted in his 7½ years with the Company and now he's looking around for more. Wouldn't you? His first one made him richer by \$2,000 in U.S. Savings Bonds.

Earns \$1,400

An inquisitive nature and the inclination to do things in the simplest way paid off for Lee Dubey, too. Lee is a group leader in Technical Services, Plant 34. He's also heavier in the wallet by \$1,400 in bonds.

Dubey, who started with Grumman



Top winner. John Pierini (C) chats with Vice President Ralph Tripp (L) and Chuck Kroupa, director of Operations for Grumman at KSC, about his jackpot bond suggestion. (Photo by John Vandegriff)

in 1943, left in '45, and came back again in '65, proposed that many of the procurement lists required of vendors proved to be redundant or of little use since they had to be re-typed and put in different form before submittal to the Navy.

Well, why not eliminate the requirement, queried Dubey? That "why," simple as it seems, was the opening wedge which led to his prize-winner. It wasn't the first time he's hit the gong though. He sports a number of Project Sterling pins for other winners, and he has earned small bond awards before, too.

Another winner

Harold (Wes) Wessel is a maintenance electrician who thinks that "Grumman, like everybody else, is looking to

save a buck here and there." And being a very accommodating fellow, Wes tries to help the Company do just that.

While reading an electrical publication last year—he keeps apace of the latest trends that way—Wessel noted with interest that a new type of wire had just hit the market. Since it could be substituted for a heavier gauge building wire, he saw the product as something else, too: a big money saver in time and material during installation.

Wes made sure that Grumman knew about the new product, and, after urging from maintenance supervision, he submitted the suggestion for its cost savings. Coming up with an \$1,100 award certainly surprised him because "It wasn't that big a deal." Apparently

(Continued on page 8)



Idea men. Wes Wessel (above) and Lee Dubey parlayed simple suggestions into big suggestion money-winners. (Photos by Nat Scherer)



Salute Company for strong show in U.S. Savings Bonds campaigns

Four separate awards came to Grumman recently via the U. S. Treasury Department's goodwill ambassador, "Mrs. U. S. Savings Bonds," Jeanie Smith.

Practical guy



You might say that Lou Edwards, a 28-year-old machinist at Plant 58 in Sterling, Va., is a man of strong convictions. He's not crazy about wearing safety glasses. In fact, he says "I hate the damn things."

But Lou is also a very practical guy. In spite of his personal aversion to safety glasses, he wears them. And it's lucky he does.

Recently, Lou was operating one of the big milling machines at Sterling when a metal chip flew off the billet he was working on and headed right at him. It took only a split second. Lou saw it coming, but too late. He flinched and nearly avoided it entirely, but the huge chip glanced off his left safety glass and caromed away.

"Didn't even smash the glass," Lou recalls, "but it went on another 20 feet or so and hit another guy on the shoulder. He knew he was hit. I'm not sure I'd have lost my eye if I didn't have glasses on, but it would have done damage. It was a pretty damn big chip."

Edwards has been with Grumman about two years, and has been a machinist nearly seven. He still hates to wear safety glasses, but, he says, "When I need them, I wear them."

They gave Lou a Wise Owl certificate a couple of weeks ago but he already had supplied himself with the best present possible: He can still look at his pretty wife and young boy with both eyes. As he puts it, "I don't like the idea of running around with one eye." Neither do we, Lou, neither do we.

The lovely lady, who has done modeling and is clearly suited for it, presented Chairman of the Board Clint Towl with a three-starred Minute Man flag to symbolize the Grumman Corporation's three consecutive years of participation in the Payroll Savings Plan at a level of more than 50 percent. The figure, in fact, was 96 percent participation for Grumman.

After remarking that the men and women of Grumman had responded "enthusiastically," Towl said, "We are proud to be in a program that concerns us so directly—one that benefits us as individual citizens just as much as it helps the Nation."

Industry chairman

Towl was the 1970 chairman of the Bonds drive for the aerospace industry.

Mrs. Smith also presented a Minute Man statue to Vice President Jack Retaliata for his role as Savings Bonds chairman in Grumman, a citation to Gus D'Errico as coordinator of the in-house drive, and a citation to Lloyd Lee as coordinator for inside and outside efforts of the Company.

For Mrs. Smith, who is married and the mother of three children, it has been "a wonderful and exciting experience. I've met so many wonderful people!" Now she's off on a month-long tour that includes stops in Okinawa, Formosa, Japan, Vietnam, and Thailand.



Goodwill ambassador. Mrs. U.S. Savings Bonds, Jeanie Smith, assists Bill Fuller, N.Y. area manger for Savings Bonds, and Board Chairman Clint Towl to display Minute Man flag presented to Grumman. (Photo by Fred Annette)

Call first test flight of A-6E 'outstanding'

"It was an impressive first flight," says Ray Sears, A-6E Program manager. "We achieved all our planned objectives."

Project Pilot Joe Burke and Bombardier/Navigator Jim Johnson put it another way. When describing the performance of the new APQ-148 radar during the first flight of the A-6E on Saturday, November 14, they used words like "Exceptional" and "Outstanding."

The new radar—a single unit that replaces both the track and search radars in the A-6A—will provide the A-6E air crews with a much more defined "highway in the sky" for their attack mission, and at a weight saving of 300 pounds over the old equipment.

The A-6E is an updated state-of-the-art version of the A-6A Intruder, the aircraft that has been the mainstay of the Navy and Marine air forces for all-

weather attack. Although the A-6A and A-6E look the same, the resemblance is only skin deep. The latest version of the Intruder comes equipped not only with the new radar but with a new computer, weapons release system, and analog-to-digital converter as well, all of which incorporate a self-test capability to improve maintainability.

Flight testing of these components has been going on since early 1970; the Norden APQ-148 radar is the last major component to be integrated into the A-6E weapons system.

Don't sell the A short, though. Because of the A-6A's success with the Navy and Marines since it was introduced to the Fleet in the early '60s, the Navy provided \$48 million for a development program to incorporate the latest state-of-the-art components into the bird. These changes, it is expected, will provide increased reliability and easier maintainability for the A-6E.

Flight testing is to run through mid-1971, with Board of Inspection and Survey (BIS) trials scheduled for September, 1971.

Ad note

When you submit ads to Plane News, please include your home telephone number—that way the Company phone lines won't be tied up unnecessarily. When mailing the At Your Service form (available at ESO and Engineering counters), remember: Plane News is now situated in Plant 5.



First team. Hard work and team effort pay off. Witness the successful test flight of the A-6E. And here's the first team on the A-6E from Flight Acceptance, Production and Engineering. (Photo by Ed Finnicks)

GRUMMAN, November 30, 1970

Big chance!

Art lover? Here's your chance!

From now until Christmas Grumman employees on Long Island have an opportunity to buy color canvas reproductions of paintings by the masters. Each framed painting costs \$25.

According to Gus D'Errico of Employee Services, the reproductions are available by special arrangement through Authenticolor, Inc., and only 175 of each of the seven masterpieces will be produced. There will be no more. The facsimiles not sold here at Grumman will be sold to galleries.

The mahogany-framed reproductions are "Idyle" by Renoir, "Les Plumes en Fleurs" by Chagall, "The Apache" by Remington, "Portrait of Jaime Sabartes" by Picasso, "Madonna and Child" by Botticelli, "Girl with Hat" by Renior, and "The Journey of the Magi" by Sassetta.

The reproductions will be displayed on a rotated basis at Employee Services in Plants 1, 2, 3, 5, 6, 15, 25, 27, 30, 34, 35, and 41. So, if you're an art lover. . . .



Back in town. Three of the nine TC-4Cs now in service with the Navy and Marines are back at Calverton for annual FAA inspection. FAA and Navy inspectors will certify them for service following inspection. (Photo by Jerry Costello)

TC-4Cs at Calverton for electronic updating

Three of the "flying classrooms" produced by Grumman a few years back for A-6 bombardier-navigator training are back in Calverton. They're now undergoing a thorough examination under Navy contract as part of their FAA annual inspection. Under the agreement, Grumman will make necessary maintenance and repairs on the airframe (a

modified Gulfstream I) and will also update A-6 electronic equipment aboard the aircraft.

There are nine TC-4Cs in service—three each at the Marine Air Station at Cherry Point, N. C., and at Naval Air Stations at Oceana, Va., and Whidbey Is., Wash. Eventually, it is expected that all will be returned to Calverton for the same type of FAA inspection.

Tom McGrath, program manager on the TC-4C, describes the program as similar to "depot-level maintenance"

and expects that costs can be kept low by using engineering, program, and production people on an "as-needed" basis—that is, they will be assigned to the program just long enough to get their own portion of the job done, and won't be charged full-time to the program.

Managers working on the inspection effort with McGrath are: Jim Koschara, Production; John Diglio, Engineering; Stan Ramsden, Product Support; Dick Cabbie, Contracts.



Travellin' time. Should you be thinking of taking a trip, these two travelling bags modelled by pretty Kathy Lennon of Plant 2 may be just what you're looking for. There are many other items on display at the Flight Shop in the Employee Services offices. Having trouble deciding what present to give at the holidays? Maybe you'll find one among the many attractive gifts in the Flight Shop. (Photo by Larry Van Wallendaal)

We get letters...

To the editor:

Don't let this happen to you. If you are planning to take a vacation or trip, make sure you're entirely familiar with the travel agency you are dealing with.

My fiancée and I decided to make reservations for our honeymoon with a travel agency.

Everything appeared very "normal." We were going to Hawaii on United Airlines. We had reservations for two weeks at the Holiday Isle. The only thing that seemed odd was that they required a \$200 deposit, but I had thought the deposit was high because it was a big trip. So we paid it and got a confirmation of our trip within the next week. The following week I received in the mail a letter from the travel agency telling us that they were going out of business and they were sorry that they couldn't help us, but due to financial difficulties they had no more assets and owed many people money.

This letter was politely telling us that we had been fooled. I then proceeded to call everyone to find out what I could do about this deposit we had given them. I called:

- The airlines
- Wholesale travel agents
- Bankruptcy courts in Mineola and New York City
- District Attorney
- Office of Consumer Affairs

- Office of Consumer Frauds
- and even Action Line

All I could find out was that they are not claiming bankruptcy. It was a big fraud. So please, if you are making reservations through a travel agent, investigate him thoroughly and make sure that you're dealing with a reputable firm.

From one who was tricked,
Jo-Ann Alvarez

Planning Dog Club

Grumman going to the dogs? No, but some people at Grumman have started a Dog Club, sanctioned by GAA, for the benefit of all dog lovers at Grumman.

The club held its first meeting on November 9. Those who didn't attend can plan to make the next meeting on January 11 at 8:30 p.m. in Plant 28. From then on there will be regular monthly meetings at which members can exchange information on various aspects of dog breeding and handling. All Grummanites, members of their families, and retirees are invited to join.

Says Edith Farrell of Payroll, Plant 5, the organizer of the Club. "There is nothing nicer than having a well behaved, obedient dog around the house." She ought to know, at the last count she had 15 dogs around her own home.

If you want more information, call Edith on Ext. 2121.



Service presentation. Vice President Corky Meyer (L) took time out on a recent trip to Plant 77 at Stuart, Fla., to present 15-year service pins to Jim Dowling, Bob Grover, and Jim Morgan. Assisting Meyer were Ed Denzler (2nd L), Bill Bedell (C), and Jim Houlik (R).

Myers views space efforts

(Continued from page 3)

Myers then dug into something close to Grumman hearts right now—a reusable space shuttle that, because it's reusable, will trim the costs of satellites and space equipment while also making space travel easier. He also mentioned that should malfunctions occur in orbit, the shuttle could be brought back to earth "for adjustment (of equipment), repairs, and refurbishment. And in many cases, scientists will be able to go into space to adjust and operate their instruments, just as they do today in balloons and aircraft."

Look to future

All ramifications of a space shuttle—including costs and benefits—have been studied in depth, Myers said, and "We found that the Department of Defense would be able to place 2½ times as much defense equipment in space per dollar cost (as compared with expendable vehicles). And we found that the support of a manned orbiting space station would cost about a third as much."

Finally, Myers pointed to two other developments: a Skylab using Apollo hardware that would stay "up" for eight weeks to conduct a variety of experiments, and, with the President's concurrence, shuttle-oriented international space programs that have drawn interest from the Soviet Union, Belgium, France, West Germany, and possibly other European countries.

"Neil Armstrong was prophetic," Myers observed, "when he said it was 'one giant leap.' Actually, it was the first step to man's free movement throughout the solar system."

Three turn 'simple' ideas into top bond awards

(Continued from page 5)

the Employee Suggestion Committee felt differently.

There are no sure ways of coming up with winning suggestions, Wes feels, but there is one sure way of making yourself receptive to new ideas: "Look around, observe, see what's going on. Usually changes are for the better."

It was the third time that Wes has earned a bond award, and it may be the last one, too. He has made assistant foreman since the big idea took hold—

now he feels that new ideas are part of his job!

Others hitting the bond jackpot for ideas they had submitted are:

Dave Lamberson of Requirements Planning, \$600, for his timely discovery that a spares drawing for a TRIM pod shell mistakenly included some very expensive electronic equipment that shouldn't have been in the drawing.

Bill Farrell and John Powles of Critical Material Control, \$300 each, for uncovering "surplus" plastic stock that could be used in production.

Stan Miron of the Warehouse, \$500, who suggested an improved method of material handling on A-6A wing skins.

Harry Hicks of Hydraulics, \$400, for devising a new method of laying out bend radii on hydraulic lines, using a plastic protractor.

The roundup of suggestion winners:

\$200—Ed Watson, Jigs and Fixtures; Lou Amoro, Tool Fabrication; Walt Mayor, Schedules and Manpower.

\$175—Jim Schnaderbeck, Production Support; Art Conchilek, Tool Fabrication.

\$150—Paul Okula, Major Assembly.

\$125—Tom Corley, Data Operation.

\$100—Howard Cooney, Tool Fabrication; Frank DeRosa and Leo Krug, Hydraulics; Al Helrigel, Tool Fabrication; Hal Sherwood, Fiberglass; Sal Costa and Al Pennetti, Minor Sub Assembly; Henry Morgan, Fuselage Joining.

\$75—Frank Slinkowski, Inspection; Angelo Pomponio, Final Assembly; Henry LaFlamme, Machine Shop; John Wojtyna, Maintenance.

\$50—Ed Wilson, and Rocco Famiglietti, Assembly; Angelo Pomponio, Final Assembly; George Barhold, Instrument Test; Charles Kemper, Hydraulics; Roger Kapp, Fiberglass.

\$25—Frank Marcouiller, KSC engineering; Dale Daniels, KSC engineering; Elmer Howland, Tool Fabrication; Arthur Miller, Tool Fabrication.

Name Wood GDS vice president

Walter Wood has been named Vice President - Account Management for Grumman Data Systems according to an announcement by President Pete Viemeister. Walt, who joined Grumman in 1956, will represent GDS with Grumman Aerospace and with commercial firms.

Walt came to Grumman to work in Engineering planning, and in 1961 became associated with Program Management to help develop Resource Systems.

In 1968, he was appointed deputy director of Operations and Scheduling, in September of '69 he was named staff assistant to President Pete Viemeister of GDS, and made Aerospace Accounts manager last March.

Wod received his degree in Economics from St. Johns in 1952 and served two years with the U.S. Army in Korea. Walt and his wife, Anne, live with their four children in Northport.



Walter Wood

You can help

With Christmas less than a month away, Art Leach, who heads Communications Services, hopes that his holiday present comes a little early. And if you use the inter-plant mail service, you can help him get that wish.

Art requests that all Grummanites take a little more time in addressing inter-plant envelopes to make sure they are legible (so Mail Room personnel can read them easily) and the addresses are also the correct ones. It will help you out too, he suggests, since a legible, correct address will insure swifter delivery, always to the right location.

Safety tip

Ed Okon of Presentations Services forwarded a newspaper clipping that he feels could be of vital interest to some people at Grumman. The clipping, from the Sunday News, reads:

"If you have a Model 1110 or 1115 Samsonite Electric Can Opener with the Samsonite name molded in the plastic casing, return it to the Samsonite Corp., Box 5522, Denver, Colo. 80217. It will be examined and, if defective, repaired and returned at no charge. All can openers carry the required Underwriters Approved Label. A few may have a defective electrical connection making them potentially unsafe. To protect our customers, we are recalling the entire production."

Thanks, EMO.

OBITUARIES

Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.

JOHN E. BUHLER of Tool and Methods Engineering, Plant 12, died December 11 at 56 years of age. He had been with the Company since 1951 and lived at 476 First Ave., Bayport.

JOHN P. RYAN of Receiving Inspection, Plant 24, died November 19 at 61 years of age. He had been with Grumman since 1954 and lived at 536 Smithtown Ave., Sayville.

PASQUALE DEVINO of Electrical Fabrication, Plant 55, died at the age of 46 on November 20. He had been with the Company eight years and lived at 713 Windsor Rd., Savannah, Ga.

FRED YEVIOLI of Maintenance Facilities - Equipment & General, Plant 6, died November 21. Born February 1, 1907, he joined Grumman in January of 1954. He lived at 94 East St., Middle Island.

WALTER SWANSTROM of Plant 16 Tool Fabrication - Templates died November 23. Born July 16, 1922, he had been with Grumman since September 30, 1948. He lived at 91 Floral Ave., Bethpage.

GRUMMAN, November 30, 1970

Cominski hits 682 in Babylon Mixed

Steve Cominski isn't leaving much doubt as to his intentions in the Wednesday Mixed loop at Babylon Bowl. He's out to corral all the men's honors, and he doesn't care who knows it. In recent weeks, Steve set up the high game of 248, then came back with a whopping 682 string on games of 245, 233, and 204. His 188 average also leads the league, so there's really not much left for the rest of the guys. It's a little closer in women's individual competition. Janet Thomas has high series of 516, with Pat Sabatelli's 505 and Roseann Gabriel's 491 not too far behind. Other highlights in recent sessions were Bob Butts' 536 and 204-554, Pete Jordan's 538, and Ed Gabriel's 537, while Barbara Betts clicked off 477 to shade Janet Thomas's 476 for women's honors.

Al Moser's 621 Trader league record came tumbling down a couple of weeks ago at Oscar's in E. Islip as Frank Nelson vaulted to a 653 with help from a 228 line. Earlier, Jim Day cashed in 231-604. . . . And the same fate was in store for Dan Aquilino when Ed Lomot opened fire on Dan's 613 series record with a 202, 209, and 218. It added up to 629 and a new mark to shoot at in the Aerospace loop. Brightlights in the competition were Bill Swinsin, 201-202-593; Dick Corrigan, 203-654; Joe Aquilino, 201-563; and Tom O'Connor, 201-558.

Pistol prizes

Competition is under way in the L.I. Industrial and South Shore pistol leagues for the 1970-71 season, and heading the Grumman contingent in the two loops are three teams that captured championships in last year's action.

The Grumman Trackers, with a 13-1 record in the Industrial league, won first place in the Rim Fire-Expert Division. On the squad with captain Art McKee were Jerry Minerva, Al Berka, Greg Criscione, Lou Minerva, Tom Mugavero, Ed Bennett, and Roger Seybel. Berka's 277 average led the team.

In the Rim Fire-Sharpshooter Division, captain Herb Wolter led the Grumman Gulfstreams to a 12-2 Industrial mark with a 258 average. Other squad members were Harvey Sperling, John Crawford, Bill Prinz, and Milt Fishman.

In the rugged South Shore league, Berka fashioned a 274 average to pace the Grumman squad to a 14-0 season and first place in the Center Fire division. Members of the championship club included captain Ron Trenkner, Art McKee, Rick Wicks, Tom Mugavero, John Crawford, Paul Pantason, Mort Weinberg, Harvey Sperling, Ed Moles, Jim Barry, and Greg Criscione.

. . . This is the season for way out team names. We have the Lollipops in the Black league—they've already made the news—but how about those crazy Pocketbooks in the Blue Mixed!

Nears record

Ralph Laurino had to be holding his breath earlier this month during play in the Nite Owl circuit. Ralph has a pretty good hold on high series with 706, and also has high game of 226—but there was that guy Rudy Dunkley having a run at his mark. Rudy finished with 265 in a 632 series. But judging by Rudy's 188 average—high for the league—he'll be making another run at that record very soon. Stay loose, Ralph. And Judge Locke put a 237-200-606 on the Owl scoreboard to share recent honors in the loop. . . . Brown league highlights were Al Jowid's 224-585, John White's 221, and John Hawk's 544.

Although they still hold first place in the Masters League, the Whoizees must have shed a few tears when their team series mark was snapped—and by only one pin—as George Ulrich's 237-806 led the Southpaws to a 2328 total for four games. John Betterino did his thing again—he led the loop with 828 on 200, 201, 201, and 226—and boosted his average to 192. Other high scores were Bruce Karen's 235-810, Ray Zeller's 229-797, and Pete Katalo's 769. . . . Joe Sorro's 218-545 led the Rocket league, and our thanks to secretary Dick Bereis.

One-upmanship

Sid Weihs and Val Gilreath shared high game of 223 in a recent session of the Monday Mixed circuit, but then Sid moved out to hit 636, boosting his own series mark by one pin in the process. Gilreath closed at 553 while Art Clemente registered 200-578; Joe Guisari, 211-561; Donna Lawrow, 521; and Marge Rodriguez, 507. . . . In Outpost action, Bill Gallagher's 211-589, Frank Fox's 205-576; Frank Magri's 576, and John Hahn's 204-566 were bright spots. . . . Maybe it should be the Three Friends plus One. Norma Landin and Maggie Gaynor, teammates on the Good Friends, hold the Patchogue Mixed women's high game and high series records. Along comes "Friend" George Landin in a recent round with 239 to grab a share of the men's high-game mark with Ray Haas. Isn't it about time Dave Gaynor got in step with the rest of his team? George finished with 575 after his high game, while other standouts were Bob Geer, 560; Ken Becker, 204-555; and Maggie Gaynor, 521.

Bob Dudonis closed with 618 after 204 and 218 games a couple of weeks ago, but considering he holds the league records of 719, he must have felt somewhat let down. There must be some sort of message there. Well, John Lovrecich clicked off 601 on 234 and 202 to gain runner-up honors, while Bob Hoehn finished with 213-202-595, and, earlier, Don Giesemann shot 233-586 and Don Farrell, 204-571. . . . Monica Wojtyniak has taken over the game record in the Syosset Mixed loop with 247—it snapped Rita Mathia's 221 mark—and her 590 the same round came

close to toppling Rita's series record, too. Hank Abrami's 234-605 led the scoring, while other faring well were John Betterino, 238-594; Jim Gould, 217-595; Ed McGovern, 222-589; Bill Diercks, 217-584; Abrami, 590; Monica, 212-535; and Rita Mathia, 211-535.

How about that! Imagine rolling a 202-217-610 and not even making your average. John Betterino, who holds a 205 average, did it in the Black loop a couple of weeks ago. It wasn't a total los, though. John did pace the Mixers into the top spot with a sweep over the former leaders, the Choppers. Other pacesetters included Len Maniscalco, 224-609; Bob Springer, 212-595; Bob Specht, 203-203-576; Frank Weber, 572; and Stu Cornell, 572. . . . Tom McGivney punched out 224-595 to shade Lou Brida's 220-211-587 for top honors in the Red loop in recent sessions, in action that saw the Strangers move into first in the team chase. Other high scorers

Pool cues

A pocket billiards league, sponsored by GAA, is being formed for all Grummanites for the 1971 winter season. Play will be held once a week, starting at 5 p.m., at the House of Lords parlor in Plainview. Match play will be on a handicap basis, and the tab is \$1 for each session.

An organizational meeting will be held Wednesday, December 9, at 5 p.m. in the GAA office in Plant 28B, South Bay Rd. For further information call Tony Scura, Ext. 7941, George McLaughlin, Ext. 2250, or Mike Cherry, Ext. 2133.

included John Kielbasa, 219-564; Joe Peterla, 214-571; Brida, 207-215-569; and Charlie Marcaletti, 210-560.



Team champions. L.I. Industrial rifle champs from Grumman are taking aim at 1970-71 crown with lineup that includes (front) Joe Russak, Bob Lang, Warren Block, Henry Shoten (back) Hank Womble, captain Al Burns, John Mitchell, Dick Imgram, and Ed Brandis. (Photo by Harry Prodromides)

Research discovers winning hoop formula

The Knicks they ain't, but Research basketballers are talking in "speculative" terms following their opening 79-60 win over the Supporters a couple of weeks ago Thursday night in the Tuesday/Thursday night league. It was Research's first victory in 25 league games, dating back to the 1968 season when Research fielded its first team in the Grumman league.

"It was our dazzling speed and meticulous shooting that did it," commented manager Howie Levine with tongue in cheek. "It shows what patience and perseverance can do."

"Actually, we did win one game in 1969, but it was by forfeit," Levine explained. "And back in 1968, we lost two games by two-point margins. But 'almost' doesn't do much for team morale."

Research, a team that sports five Ph.D.'s among its 10 regulars, led the

Supporters throughout the game, substituting profusely as victory approached reality.

Mike Shilman, a Research forward, was top scorer of the game with 24, followed by Research's John Brook with 16, and Mike Forman with 15. Tony Sterrantino led the Supporters with 18. Research led at the half 37-28.

"We aren't making any predictions for the rest of the season," Levine said, "but one thing is certain: with this first victory, our record is already improved over the last two years."

In the Wednesday league, the Road Runners whacked Propulsion, 116-59. John Ebron led the scoring with 30 points, with teammates Jack Scully and Gary Pike contributing 23 and 18, respectively.

Ride Wanted

DEER PARK: L.I.E. Exit 51 & Deer Pk. Rd., to Pit. 30, 8:30-5. JU 6-5050.

WILLISTON PK.: To Pit. 30, 8:30-5. 741-0860, after 6.

COPIAGUE: To Pit. 35, 8-4:30. 842-2313.

FOREST HILLS: To Plant 5, ngts. 212 544-5553.

Riders Wanted

ISLIP: Bay Shore area, to Bethpage plts., 7-4 p.m. 277-0419.

Car Pool

BKLYN.: Vic. Kings Hwy. & Ocean Pky. to Pit. 15, 8:12-4:42. 212 NI 5-4283, after 6.

BKLYN.: Belt Pkwy., Bay 8th St. or Bay Pkwy. to Pit. 30, 8:30-5 p.m. 212 CL 6-0413.

EAST ROCKAWAY: To Pit. 5. LY 9-6093.

Wanted

APT.: 1 bdrm., for young married, Mid-Island, North or South Shore. HA 3-3487, to 9:30 p.m.

ENG.: Hodaka motorcycle, 90 or 100cc, 4 or 5-spd.: metal lathe, 6 in. swing; drill press. PY 8-4258.

SERV. MANUAL: '65 Olds. 543-9307.

MEAT GRINDER: Electric. 669-1856.

APT.: 2½-3½ rms., for March or Apr., Nassau County. WE 5-2213, after 5:30.

HOUSEMATE: Share house w/5 Grumman eng., 15 min. from Bethpage. 692-5399, after 6.

RUNABOUT: 15-16 ft. fbgl. w/35 to 40 hp outbd. & trlr., approx. price, \$500-\$600. 212 846-6518.

WNLS.: 14 in. Pontiac Rallye II. 234-8310.

HOME HUMIDIFIER: W/8 to 15 gal. tank capacity. 643-8493.

DOMESTIC: To perform gen'l. lgt. houseclean., 1 day a wk. 368-5767, evgs.

BOAT TRLR.: Suitable for 14 ft. Sunfish, not over \$75. 261-8790.

MISC.: 12 in., 4 bolt whl. & tire for boat trlr.; 3 gal. gas tank for Mercury outbd. BA 3-1214, after 6.

DRAFTING TBL.: Charles Stuart, Ext. 1657.

PRESS: Hand print., 9x13 max., access., fonts. AM 4-5666.

CHAIN SAW: Sears pref. AM 4-5689.

METAFRAME: Weluxe full hood for 29 ga. aquarium. 212 459-8859.

MISC.: 2 Whls., for '69 Datsun; guitar, nylon strings, non-elec. 757-8535.

BOOKS: On shoot., hunt., fresh water fish. & gun collect. 757-8850.

For Rent

ROOM: F'dale, pvt. ent., share house w/2 bachelors, all util. 293-8347, after 5.

APT.: E. Marion, 2 bdrm. deluxe, firepl. in liv. rm., lrg. kit., roof. terrace, new basebd. heat, \$145/mo. incl. elec. & hot water. 671-4946, after 6.

APT.: Sublease, 4½ rm. garden apt. in Bay Shore, \$220/mo, \$350 security, avail. 11/15/70. 666-4275.

ROOM: Furn., pvt. bath & ent., nr. Grumman. WE 5-5012, after 6.

ROOM: Furn., 4 mi. Grumman, sep. heat zone, linens, lrg. closet, gent. only. MY 4-5814.

ROOM: Furn., pvt. home, attach. bath, linens, gent. pref., nr. Pit. 2. WE 5-3588.

HOUSE: Bethpage vic., 3 bdrm., 2½ bath, 8 rm., for 6 mos., start. Dec. 1, \$300/mo. WE 5-7624.

APT.: Furn., 2 rm., util., \$125 mo., 1 mo. secur., sgl. or bus. couple. TU 8-7309.

ROOM: W. Farmingdale, pvt. bath, 10 min. plts. CH 9-2873.

ROOM: Hicksville, pvt. home, gent. pref. WE 5-2466.

ROOM: Bethpage, furn., pvt. home, gar. opt., bath, linens. WE 5-2055, after 4:20.

APT.: Lake Ronkonkoma, 3 rm. w/pvt. ent., bus. cpl. only. JU 5-6020.

ROOM: Bethpage, furn., pvt. ent., lrg., nr. GAC Plts., reason. 938-8638, after 5:30.

HOUSE: Oldfield, o'look. L.I. Sound, col. 4 bdrm., 2 bath, 2½ acre, dishwash., pvt. bch., guard, \$350/mo. 829-9627.

WISE: Metal shop type, 35 lbs., or hvier. 751-2283.

For Rent

APT.: Comp. furn., slps. 6, Ski Chalet nr. Hunter Mt. West vic., reason., daily or wkly. 212 IL 8-8093.

HOUSE: Furn., avail. Dec., \$200. 842-0963.

Swap

REEL MOWER: Toro pwr. & Sears Simpson, both for 1 rotary. 727-7831.

Adoption

PUPPIES: 7 Cocker spaniel mixed, male & fem., brown, blk. & mix. mark. 781-1131.

PUPPIES: 3 Germ. Shep., 6 wks. old. IV 9-6437.

Free

MISC.: 3 memosa trees, must dig up & home made tble. saw. HA 7-0485.

For Sale

OLDSMOBILE: '64, F-85 deluxe, 4-dr. sed., V-8, auto., pwr. steer., radio, snows, \$375. 423-3440.

MERCEDES BENZ: '59, 300SL, new tp., paint & Dunlop radials, low mi., comp. ownership hist. 294-0147.

CUTLASS: '65 conv., wh./blk. int., new tires, chrome whls., shocks, bks., exhaust sys., pwr. steer. & bks., & wind., tape deck, \$940. 588-9617, evgs.

MERCURY: '61 Colony park wag., R&H, auto., air cond., \$125. 271-1617.

MISC.: '70 Maverick, full trim, auto., R&H, w/w, \$1,695; '66 Honda, 305cc, \$350. 671-0517.

at your SERVICE

This is a free service to Grumman personnel for non-commercial advertisements, accepted on a first-come, first-served basis. Classified advertisements are carried in PLANE NEWS only on the basis that everyone replying to such advertising will receive fair and equal consideration regardless of their race, creed, color, or national origin. Type or print ad on form available at Employee Services and Engineering counters, and send via interplant mail to PLANE NEWS, Plant 28A, Bethpage. List home phone (with area code if outside Nassau or Suffolk). Limit: one ad per person per issue. No item under \$10, no firearms or ammunition.

For Sale

HOUSE: Selden hi-ranch, 9 rm., 5 bdrm., 2 bath, sun-deck & gar., new w-w, wood. lot, landscpd., \$25,990. 732-0828.

HOUSE: Idlehour Estates, Oakdale, 3 bdrm. ranch, 2 full bath, attach. gar., lrg. firepl., patio, Anderson wind., o.h.w. heat, xtra cap. domestic hot water, cath. ceil. liv. rm., appli., Indscpd., \$29,000. LT 9-1502.

HOUSE: Bethpage, 3 bdrm. mother-daugh. split, 1½ bath, appli., carpet, xtras, nr. sch., RR, community pool. WE 8-3824.

LAND: 2/3 acre wood. lot, Chalet village, nr. Con-way N.H. in White Mt. ski country, fully develop., vacation community w/3 lakes, mt. tp. pool, tennis courts, water & elec., \$3,900. 586-3511.

LAND: Canada, \$20-30 per acre, gd. camp grnd., hunt. or invest., access. via rd. way, approx. 2 mi. off Trans.-Can. Hwy., stream crosses prop., sma. lake nearby. Bob Newlander, Ext. 7201.

PLYMOUTH: '67 Valiant, auto., pwr. steer., R&H, new tires, shocks, tint. windshld., orig. owner, ask. \$975. 212 961-0792, after 6.

LEMANS: '67 blk. conv., V-8, 326, auto., pwr. steer. & bks., best offer. F. Neuscheler, Ext. 86625.

MUSTANG: '70 grn. conv., V-8, auto., \$2,450. 757-1718, after 6.

CHEVY II: '64 wh., 6 cyl., std., R&H, \$200. 265-1397, after 6.

FORD: '69 Fairlane, pwr. steer., auto., R&H, 2-dr. hdtp., \$1,995. 212 LA 7-2478, evgs.

TRIUMPH: TR 3, sports, nds. paint, \$400. OV 1-1286.

MERCEDES BENZ: '68, 250 SE, auto., fuel inject., leather int., Blaupunkt AM/FM, pwr. steer. & bks., 13,000 mi., wh., best offer over \$4,550. 724-7536, evgs.

at your SERVICE

For Sale

FALCON: '63, 4-dr. wag., auto., \$350. AN 5-5737.

MUSTANG: '65 Ford, wh./blk. tp., 8 cyl., std., ask. \$875. LT 9-0206.

PLYMOUTH: '70 GTX, lgt. grn., 440 c.i., 375 hp, Torqfl. trans., Ram air, posi, tach & clock, bkts., cons., AM/FM, stereo, spec. alarm, F-70 poly tires, \$3,300. MA 3-8246.

CORVETTE: '65 conv., red/blk. tp., 327 c.i., 300 hp, auto., pwr. steer. & bks., 4 whl. disc, R&H, air cond., \$1,500. 378-5361, after 6.

PLYMOUTH: '68 Fury II, 383 eng., 290 hp, air cond., pwr. disc bks., radial tires vinyl hdtp., gold w/blk. tp. 796-6917.

PONTIAC: '66 GTO conv., yel., '68 Firebird 400 eng., 4-spd. stick & tri-pwr., new tires, \$1,200. 893-2825.

BUICK: '69 LeSabre, 2-dr., air cond., pwr. steer. & bks., vinyl tp., rear spkr. & defogger, snows, use reg. gas. 781-4871.

VW: '62, orig. owner, \$200. 751-2923.

CADILLAC: '66 Coupe De Ville, full pwr., air cond., vinyl tp. John D'Aquisto, Ext. 87155.

MISC.: 2 gold tortoise shell coffee tbls., wal. wood base, \$50; TV & stereo cab., 6 ft., wal. wood, \$200. 826-4554.

SOFA: 3 pc. straight sect., 11 ft. long grn. tweed w/tufted arms & back, grn. slipcov., \$150. 212-3512.

MISC.: 21 in. TV mahog. cons., \$35; port. Kenmore washer, 10 lb. cap., \$45; Laars gas heat. for outdr. pool, 2 yr., \$125; 30 cu. ft. freezer, \$50. 665-4008.

MISC.: Refrig., \$45; tbl., \$18; 15-spd. Mixmaster, grinder, juicer, etc., \$40, others. WE 5-7624.

MISC.: 24 ft. wood ext. ladder, \$20; hope chest, cedar lined, nds. paint, \$10; bookcase w/drs., \$10; kit. set w/4 chrs., \$15; reel lawn mower, gas, \$20. MO 7-1426.

For Sale

GAS DRYER: Maytag, \$25. 334-8457, after 5.

MISC.: Adj. ski rack, \$20; radio telephone & transmitter, 4 channels, \$125; lawn hand spreader, \$12; Harvard adj. steel bedframe w/whls. 681-9568, evgs.

BRAIDED RUG: Brown/beige/tan, 9x12, clean. & pkg. for immed. use, & 2 wh. lamp bases, \$30. 798-8033.

PIANO: Lester, Betsey Ross cons., spinet, incl. bench, recent. electronically tuned, \$350. 842-2711.

PUPPIES: German short-hair. pointer, AKC, tails dock., rdy. for Xmas, reason. 473-1744.

PUPPIES: Gold, retriever, field & show, \$150. 751-5137.

PUPPIES: German Shep., AKC, champ sired, lrg. boned, male \$125, fem., \$100. MO 9-3255.

COLLIES: Tri, AKC, champ breed, reason. MY 4-1991, 12 - 10 p.m.

PUPPIES: Great dane, blk., AKC, show qual., \$100 & up. 368-5993.

PUPPIES: Siberian husky, champ bid. lines, B&W, reason. 265-5567.

PUPPY: Samoyed husky type, male, 8 mo., AKC, housebrkn, all shots, wh. w/blk. pts., gd. w/child. 785-1248.

POODLES: Mini, gd. Xmas gift, \$125-150. 271-3164.

SAMOYDE: Wh., fem., 13 mo., spayed, gd. w/child., \$100. 325-0834.

HOUSE: Brick Cape Cod mother & daughter, 80x100 w/gar., Hicksville, 4½ rms. down, 2½ rms. up, \$35,000. WE 5-8773.

PROPERTY: 20 acres, Sullivan County, wood., water, pvt. rd., \$600/acre, 2½ hrs. L.I. 261-9132.

SKI BOOTS: Dbl., quick lace, \$15. Pete Martin, Ext. 2241.

CHEVROLET: '61 Impala conv., 283 eng., gd. for parts, \$25. JU 7-4176.

SAILBOAT: 24 ft. O'Day Tempest, slps. 4, galley, hd., main sail & jib, cush. for cab. & cockpit, 8 ft. self bail. cockpit, 6 hp Johnson, \$4,100. 223-7875, evgs.

SURFBO.: 9 ft. 6 in., Sears "Surf 6", \$50. MO 9-2892.

MISC.: Mod. china closet, \$90; wrought iron tbl. & chrs., \$45; new wire whl., 6.50x15, \$20; Hoff-nor guitar & case, 3 mo., \$85. 261-2645.

MISC.: Super "O" semi-port. RR Empire, \$330; 8mm B&H director "267" projector, \$85; tropical fish equip., \$60; Sears mangle, \$23; 2 Hlwd. bds., \$10. 265-6606.

PASSES: 3 to Camelback ski area, gd. for all lifts, '70-71. LI 1-8750 after 9:30

HOUSE: Setauket, 3 bdrm. ranch, 3 Vill. sch. dist., panel. den w/firepl., brick patio, redwood pool, prof. Indscpd., bsmt., o.h.w., cust. cab. lined kit., xtras, \$31,500, 6% mtge. avail. 751-5791.

DODGE: '67 Coronet 500, fully equip., \$1,350. 265-7036.

OLDSMOBILE: '69, 442 cpe. W-30, turbo hydro, B&W int., 4 Mickey Thompson mag whls., \$2,600. CH 9-2776.

CHEVROLET: '55 Bel Air, std., tudor, 6 cyl., new tires, 60,000 mi., no rust, \$300. WA 9-4159.

CHEVELLE: '68, 2-dr. Malibu, pwr. glide, blk. vinyl tp., pushbtn. radio-rear spkr. & ant., posi, rear defrost., new w/w, & rear bump. guards, \$1,750. SU 5-1038.

CHEVROLET: '60, 6 cyl., auto., new tires, bks., batt., slip cov., 379-6149, after 5.

MERCEDES BENZ: '63, 300SE, fuel inject., pneumatic sus., fully auto., 4-spd., AM/FM, \$1,500. 921-0865.

MUSTANG: '70 Fastback, 302 V-8, auto., pwr. steer., w/w, cons., \$2,495. 585-5705.

TRACTOR: '56 Ford, mod. 801 w/1/3 yr. bkt. loader, snow chains, \$1,450. 757-3430.

PICKUP TRUCK: '65 GMC ½ ton, 1,000, V-6, 4-spd. cust., 8 ft. bd. wideside, 32,251 mi., \$1,000. LT 9-0050.

PARTS: VW, fuel pump, carb., 40 hp, eng. pre-heat, misc. repair kits, \$25, will sell sep. 744-2060.

HOTP.: Custom for Triumph sport, fits Mark series, \$75. 249-3128.

TIRES: 2 stud. 8.25x14 Firestone town & country snows on Pontiac whls., 1 season, \$45. 997-8565.

MOTORCYCLE: '69 Kawasaki, 350cc, 5,000 mi., lug. rack, 2 helmets, all tools, just tuned, \$600. 744-3356.

TIRES: Set of 5, used, 6.95x14 B/W, Goodyear, \$60. 212 SY 2-2584.

WNLS.: 5 Ford steel mag-style, 5-bolt, fit '65-'68 Mustang, \$75. 288-3162.

For Sale

WHL. COV.: 4, for '66 Cadillac, \$15/ea. CH 9-8320.

ENG. COACH: Biltrite, ask., \$35; & ngt. std. 543-1565.

SAILBOAT: Wood Pussey class, 14 ft. cat rig., \$175. 367-4413.

HO TRAINS: 3 eng., 10 cars, dual pwr. pack, 4x8 layout w/60 ft. of track, bldgs., switches, \$45. 751-1256.

SEW. MACH.: A&S deluxe 65, push-o-matic, all zig zag attach., \$30. MO 9-2892.

BELL & HOWELL: 16mm, mod. 70DL, triple-turret movie camera w/1 in. FI.9 B&H, 3 in. telephoto & 17mm wide-angle Wollensak lenses. 265-0158.

PHOTO EQUIP.: Time-o-lite printer, safe lgts., filt., develop. tanks, sun ray 1000W lamps, spd. graphic - Optar 135mm & Schneider Angulom 1:6.8/90 wide angle. 588-1778.

SNOW BLADE: 6 in. Universal, 3 pt., never used, \$125. 924-6449.

TRAINS: Set of Lionel "O" gauge w/trks., train board, transformer & access., best offer. 585-4076.

MOD. KITS: E-2A plastic models, approx. 12 in. lg. 265-8565.

STAMP ALBUM: 65,000 spaces, 40,000 illustrations, hundreds of stamps, \$20. LO 1-0983.

LAWN VAC.: Good Rds., self-prop., 7½ hp Wis. eng., mulcher or blower, hose attach. on front, 10 ft. of hose, \$150 or best offer. 588-0023.

BINOCULARS: New, 7x35mm, wide angle, 578 ft. @ 1000 yds., case, lens caps, neck strap, lens cleaner, \$17. 731-4609.

FINE CHINA: Nasco, Paris Ngt. patt., plat. design eng. on pure wh., comp. lunch. serv. for 4, & xtra. lrg. plate, cup & saucer, \$15. 271-5583.

PLANER: Craftsman Jointer, 4 3/8, 1/3 hp capacitor motor w/std., front cont. switch, never used, \$100. TU 8-5139.

RUNABOUT: 14 ft. w/25 hp outbd., trlr., \$300. SU 1-8746.

CRUISER: '66 Argo Craft, 18 ft., Lapstrake constr., Navy tp., 40 hp Evinrude, elec., 12V gen., '68 Sealion trlr., \$1,200. 328-1375.

SAILBOAT: '69, 17 ft. O'Day Daysailer, dacron main & jib, cockpit cov., boom vang teak woodwork, mast tabernacle, ask. \$1,895. MA 3-9767.

SLOOP: 26 ft. Pearson Cmdr., main, genoa & jib sails, 6 hp O.B. aux motor, fbgl. hull, alum. mast, S/S, rigging w/9 ft. cockpit, \$5,950. 261-1186.

MISC.: '66 outbd. Johnson 75 hp w/controls, \$400; '60, 16 ft. Thorobred runabout, 3/8 mahog. ply-wood w/22 ga. fbgl. tank, xtras, \$350, \$650/both. 567-1269, after 6.

MOTOR: Outbd. Evinrude Sport Twin, 5 hp, ask. \$25. 941-3920, evgs.

MARINE ENGS.: 2 - 100 hp Volvo's w/o drives & props, xtras, \$450 ea. Will demonstrate. JU 1-1204 after 5:30.

MISC.: Winter cov., fitted, 31 ft. Luhrs flybridge sed. w130W rail, 2 yrs., \$125; match. pr. props., 24x21x1 3/8, \$150. TU 4-1894, after 5.

SHORTWAVE: Receiver, Heathkit gen. cov. & Q multiplier, \$20. 751-1256.

RECEIVER: Zenith Royal 3000, 1 transistor trans-oceanic nineband port, w/AC converter, incl. AM/FM marine & weather-navig. for sailors, \$150. PI 7-7247.

EQUIP.: Ham radio Heath receiver, mod. HR10B, 100K HZ CALIBRATORS, 80-10M, \$65. SU 5-2688.

MISC.: Stereo amp. EICO 3070 Cortina, 70W, loud. contour, full compli. of inputs, hi-lo filt., tape moni-tor, prov. for 2 sets of spkrs., both fused, THD less than 0.890, orig. pack & oper. manuals, ask. \$95. 482-8928.

WED. GOWN: Sz. 10, \$35. 585-1692, after 7.

ACCORDION: Ferrari w/gray case, \$175. Stan Wyly, Ext. 9869.

TV: 23 in. Magnavox, B/W Early Amer. cons., \$99. WE 5-4796.

SEW. MACH.: White port., rotary, reason. 731-6432.

SEW. MACH.: Federal port. w/case, incl. 14 attach., \$40. 665-7816.

FISH TANK: 55 gal., filt., pump, wrought iron std., fish incl., xtras, \$75. 884-7338.

TEST EQUIP.: Electronic, for radio & TV, scope, sig. gen., etc. 727-7831.

WINTER CARR.: Navy blue Built-rite fold., w/storm shield & matt., ask. \$30. 368-1819.

FUR COAT: Sz. 14-16, Persian lamp, ¾ lngth., lined, \$75. 889-9813.

STOVE: Old fash. household Leader, wood, coal & gas, \$70. HA 7-9020, after 5.

MISC.: 2 cribs & 1 twin carr., reason. 732-9053.

GRUMMAN, November '30, 1970

For Sale

MISC.: Baby carr., car bd., play pen; 17,000 mini H.O. scale plastic soldiers, tanks, horses, etc., all or part. 541-2264.

MISC.: 15 in. whls. off 8:45x15 tire; ladies ice skates, sz. 7; ladies roller skates, sz. 7, dishes, brown glaze serv. for 4; 3x4 wall mirror, \$10; an-tique swivel mirror, \$10. 681-9588.

FISH TANKS: 2 - 29 gal., 10 gal. std., heat., filt., hoods, gravel, bkgrnds., access., some fish, \$65. AM 4-0215.

BOOTS: Ski, men's sz. 10, buckle, used 1 season, \$25. HT 4-0065, after 5.

SKI BOOTS: Lange compet., blk. w/yel. lin. & cuff, sz. 11 W, \$100; blk. Molitor rac. boots, sz. 10½, \$50. MO 5-1228 after 6.

SKI BOOTS: Ladies Ital. dbl. boot, sz. 6, \$25. Janis Santana, Ext. 84147.

LEMANS: '69, 2-dr. hdtp., air cond., full pwr., \$2,800. LI 1-2544, after 6.

VW: '67 blue, new muff., tailpipe, bks. relined, ask. \$950. 586-7178.

FORD: '65 Galaxie 500, 4-dr. hdtp., auto., pwr. steer., & dr. locks, aid cond., snows, xtras, \$800. MY 4-5370.

PLYMOUTH: '54, 4-dr. sed., \$150. 785-5331.

TR-4: '65 red, Prillie tires, wire whls., roll bar, Abaeth muff., R&H dual spkr., new antenna, 43,000 mi., \$800. PI 2-3261.

MUSTANG: '68, 289 c.i., auto., pwr. steer., R&H, 2 new tires, \$1,450. 586-8508, evgs.

TRANSMISSION: '67 Cougar, 390 GT, 3-spd., 8,000 mi., \$80. JU 7-1484, evgs.

MINI-CHOPPER: Galaxy, Vel., 3½ hp, shocks, \$150. 433-8779, after 3.

HOUSE: N. Deer Park, 10 rm. mother/daughter hi-ranch, 5 bdrm., 2 kit., 3 bath units, 2 zone heat, in-ground pool, 2 car gar., w-w, appli., nr. sch., shops & transportation, xtras, ask. \$35,000. MO 7-1426.

BOAT: 16 ft. alum. w/20 hp Chrysler outbd., 2 yrs., & 1 yr. old canoe, \$500/all. 751-0364.

SEA SKIFF: 21 ft. Luhrs, 125 hp FWC, 100 lb. moor., plywood dinghy, all \$1,400; duck boat Barnegat Bay sneak bos, \$125; cork decoys. HR 3-5630.

SURFBD.: New Royal Hawaiian w/car racks, \$75. TU 8-9459 after 4.

AIR COND.: Window units, 1, 11,000 BTU/hr., 1, 8,000 BTU/hr. 421-2229, after 6.

LAWN MOWER: Craftsman reel type, \$60. William Hochner, Ext. 57-845.

CARR.: Built-rite eng. coach w/lrg. whls., Navy blue & wh., \$37.50. 368-2915.

SEW. MACH.: Straight stitch, full sz. cons., \$30. 751-1256.

TBL SAW: 8 in. Craftsman w/½ hp mtr., std., fence & miter gauge, \$50. Al Baker, Ext. 7181.

PUPPIES: Labrador, AKC, male & fem., rdy. wk. 12/23, \$85-\$100. 757-1395.

PUPPIES: German Schnoutzers, male & fem., AKC, shots. 277-9224, after 6.

MGB: '66 hdtp., soft tp., rebilt. eng., 1½ yr., R&H, wire whls., 30,000 mi., \$1,150. WE 1-2461.

CAMARO: '69 SS, blue, 350 c.i., 300 hp, 4-spd. 373 posi-rear, full gauges, pwr. disc. bks., AM radio, 4 new wide oval poly. tires, \$2,600. PI 1-7494, after 5.

PORSCHE: '70, 914, grn. w/blk. vinyl tp. & tan int., AM-SW radio, dual spkrs., Pirelli radials, 5-spd., Bursch exhaust, 9 mos., 15 mo., left on warr., \$3,400. 887-1864.

MUSTANG: '68, V-8, auto., pwr., air cond., R&H, bkt. seats, deluxe int., blue w/blk. vinyl roof, 20,000 mi., \$2,000. 427-0587, after 7.

MUSTANG: '65, 289 c.i., 3-spd., blue w/blk. int., new bks., 38,000 mi., \$800. IV 3-6975.

MERCURY: '61 Comet, 6 cyl., \$100. 585-1692, after 7.

SAAB: '63, gd. bdy., nds. eng., piston rod, \$150. 294-0097.

COUGAR: '69 drk. grn., blk. vinyl roof & int., all tint. wind., fully equip., fact. air cond., low ml. 868-7061.

PONTIAC: '68 Firebird, orig. owner, low mi., AM/FM, heat., stereo tape record., cons., auto., new tires, blk. vinyl tp., snows & extra rims. SU 1-0470.

TIRES: 2 snows, 7.35x14, w/w, used 1 mo., \$30/pr. 747-6994.

ENG.: '63 VW, 40 hp, comp. rebilt. & instal., \$150. 273-6239.

MISC.: Breakfast nook, 5x5 ft., incl. 40x40 tbl. & 2 chrs., turq. & wh., \$125; bar, 42x45x24, formica wood grained, adj. shelves, \$55. 724-6441.

For Sale

CHEVROLET: '65 SS Impala, fully equip., fact. air cond., 59,000 orig. mi., R&H, 2 new snows, red ext., wh. int., bkt. seats, auto., ask., \$1,200. 822-1005.

CHEVROLET: '68 Impala, 8 cyl., auto., R&H, 22,500 mi., pwr. steer., hdtp., V-8, 307, \$1,875. PE 1-2682.

AUTO PARTS: International dragmaster mag whls. for GM; Buick 8 cyl. o'haul. eng.; Chevy. 3-spd. trans. w/Hurst; Buick to Chevy bell-housing, all best offer. 293-9744, after 6.

HOUSE: Huntington, 7 rm. ranch, 2 baths, 1 acre, \$48,500. HA 3-6196.

MISC.: Grn. 4 pc. curved sect. couch, \$50; formica cocktail tbl., \$20; cust. antique satin drapes, wh. w/avocado trim, 146x94¼, \$60; 113x94¼, \$50; trad. antique brass chandelier, \$20. 921-3192, after 6.

DINETTE SET: Mink beige, 4 chrs., 48 in. tbl. w/2 leaves, 1 china closet, all formica, \$150. TU 4-4003.

WASH. MACH.: Sears, auto. tp. load, \$50. 588-7083.

STEREO: AR turntbl. w/ADC 10/E-MKII Elliptical cartridge, ask. \$75. 781-1182.

MISC.: Train tbl. 5x9 ft. & train bd., \$14; hi-fi port. Webcor, \$10. PY 8-9116, after 5.

SKI BOOTS: Nordica, sz. 8 & 5½ lace type dbl., \$15/ea. JU 1-7780.

DRILL: Black & Decker, new, 3/8 in. variable spd., mod. 1161, \$20. WE 5-0885, after 6.

SHOCK ABSORBERS: 2 new Monroe-matic, #2032, \$10. 588-6364.

RELAX-A-CIZOR: \$40. AN 1-0109.

MOTOR. OUTFIT: Comp. Aurora H.O. model w/cars, trk., pwr. pack & access., \$30. OR 1-4626.

SAAB: '65, 4-spd., radio w/2 spkrs., xtras, reason. 212 CL 1-0913, after 5:30 p.m.

OUTBD.: 6 hp Evinrude, lg. shaft, tp. controls, 2 props, 6 gal. gas tank, ask. \$135. JU 4-7081.

OUTBD.: 40 Evinrude elec. sys., req. work, \$25. R. O'Donnell, Ext. 2301.

MISC.: VW trlr. hitch w/eng. mount, \$25; alum. roof rack for VW, \$10; 543-4035.

MISC.: pool tbl., 4x8, slate tp., access., \$200; stereo port. phono., \$15; men's blk. ice skates, sz. 10; \$10; women's wh. Cgo. roller skates, sz. 9, w/case, \$10. PE 1-8661.

FISH TANK: 15 ga., w/full hood, filt., pump, heat., gravel, \$25. 757-7567, after 5.

DRUMS: Comp. prof. outfit, blue sparkle, bass, 2 mtd. tom-toms, fl. tom-tom, snare, 5 cym., ask. \$200. Herb Drost, Ext. 86314.

GOWN: Trad. bridal, chantilly lace, w/veil, sz. 12, \$85. SU 5-7668.

PUPPIES: Mini poodle, AKC, brown-bk.-silver, make & fem., 8 wk. @ Xmas, \$75. LT 9-1323

DATSUN: '67, 4-dr. sta. wag., snows, trlr. hitch, \$850. 269-4717, after 5:30.

CHEVROLET: '65 sta. wag., 8 cyl., tan/brown, pwr. steer., auto., radio, just tuned & winter., \$800. WE 8-0617.

CALENDAR of events

Notice of events for period Dec. 11 - Dec. 22 should reach Plane News by Thurs., Dec. 3.

Amer. Soc. for Metals: Wed., Dec. 9, Milleridge Inn, Rte. 106 Jericho, cocktails 5:30 p.m., dinner, 6:30 p.m., mtg. 8 p.m., spkr. Mr. H. Schneider of Grumman on "Design, Fabrication and Machin-ing of Exotic Metals. Joel Greenspan, Ext. 7351.

Astronomical Soc.: Wed., Dec. 2, Tower Restaurant, gen'l. mtg., new members welcome. Ed Ander-sen, Ext. 7044.

Aquatic Assoc.: Tues., 7:30-9 p.m., Larkfield Subur-ban Club, E. Northport, 10 sessions, \$15 mem-bers, \$25 non-members. 935-8584.

Chess Club: Tuesdays, 5 p.m., Pit. 3 Cafe., tourna-ment, games. Alex Ikonnikow, Ext. 7592.

Coin Club: Wednesdays, 12:05-12:50 p.m., Plant 25 Vendor Conf. Rms., buy, sell, swap or just show off. Ken Hale, Ext. 1936.

Dance Club: Thurs., advanced, Mon. beginners, 8:30-10:30 p.m., Portuguese Amer. Hall, 306 Jericho Tpke., Mineola, \$2/session. Len Luke, Ext. 9682.

Duplicate Bridge Club: Thursdays, 5:45 p.m., Plant 3 Cafe. Reserv. not req. Partnerships arranged. Pete Harrington, Ext. 1812.

Ex-Servicemen's Club: First Mon. of month, 7:30 p.m., Plant 28 audit., exec. & gen. mtg., Pete Volpe, Ext. 84754.

For Sale

VW CAMPER: '67, pop.tp.. roof-rack, add-a-rm. tent, orig. owner, \$2,200. 735-4808.

TIRES: Uniroyal snows, w/w, 8.55x14, mtd., tube-less, \$30/pr. 796-9735.

CARBURETORS: 1¼ in. S. U. tri-carb set up for Austin Healey, \$125. 757-7567, after 5.

TIRES: 2 Fisk snows, 8.85-9.00-9.15 x 15, \$10/pr; 2 Silent Guard Sealant, 8.85-9.00-9.15x15, \$10/pr. 643-8493.

MISC.: Estey chord organ, Twin Cities mod., 13 ped., variable tone control, bass & chord sect., cont. panel, earphone jack, cust. spkr., express. ped., vol. cont., w/bench & bks., \$300; TV, 23 in. Magnavox stereo phono, AM/FM comb., wal. cab., \$150. 546-8677.

SPINET: Gulbranson, wh., w/bench, \$275. FO 8-0999.

END TBLS.: 2 dbl. shelf round French prov., \$35. WE 8-2520.

HO RACING CARS: 77 sect. of trk., stunt trk., 4-spd. cont., pwr. pack, cars, access.; also Lionel 027 gauge trains, 2 eng., 8 cars, trestle, trk., trans-former, access., \$50/all. GR 5-9369 after 4.

MISC.: Kirby vac. w/attach., \$50; National food slicer, manual. PE 5-4445.

MISC.: Jr. din. rm. set w/hutch: knick knacks; bks.; men's jackets & coats; accordion; rhythm band box for organ. 543-7097.

GERM. SHEP.: Fem. tan & blk., AKC, 18 mo., best offer. 666-3796.

HOUSE: Melville, N. Y., 3 bdrm., din. rm., 2 car gar., 100x100 corner plot, xtra stor. bldg. HA 7-0771.

LOVE SEAT: \$35. PE 5-4445.

TIRES: 2 Pirelli 5.60x14, new, \$35/pr.; 2 snows, 5.60x14 used, \$15/pr., all on Fiat rims. 543-1757.

TIRES: 2 blk. wall snows, 8.25x14, \$30. 751-1084.

VW: '70 Bug, auto. stick shift, radio, undercoat, bumper guards, drk. blue, 6,000 mi., \$1,950. 884-6205.

MISC.: Castro conv., Ottoman/cov.; wool rug, 12x17; venetian blinds, 23 in., 31 in., 5 ft. pic. wind., misc. 765-2114.

MISC.: 2/6.50-13.0 Falcon snows w/studs mtd. on whls.; 1 Atlas Plycron mtd. on whl.; 1 Atlas Ply-cron tire unmted.; 1 Vanderbilt snow, all 5 for \$50. HA 1-0764.

MERCURY: '66, 6,700 mi., stored 4 yr., new tires, \$1,450. LT 9-6376, after 6.

FORD: '63 Fairlane 500, auto., V-8, pwr. steer., R&H, 2 snows w/rims, \$375. JU 1-6044, after 6.

MISC.: '60 Triumph roadster, \$375; 30 hp Mercury boat motor, \$30; 2 snow tires, 825x14, \$30, 2 tubeless tires, 825x14, \$30. CA 1-2299 after 5.

MISC.: Bk. chinese desk break front w/radio & phono., \$55; triple dresser antique wh. w/2 end cab., \$55; wh. marble like kit. tbl. w/2 chrs. & ext., \$20; snow blower, chain drive nds. fix., \$25, walnut dresser, \$25; 3 lamps. 623-0636.

GUITAR: Kapa elec., tone & vol. controls w/case, ampeg ampli., \$110. 724-6956.

'Hush, little baby, don't say a word, Papa's gonna' buy you a mockingbird ...'

If that mockingbird don't sing. . . . How many fathers have murmured those soothing words to comfort a frightened, hurt little child. Often that's all that was needed, a father's soothing words and a safe sanctuary.

But all hurts aren't so easily forgotten . . . some hurts keep hurting, and it takes more than one man to help with the cure.

The United Fund means helping others. That's all there is to it. You either do it or you don't.

Most people in Grumman are on the "do" track. In fact, more than 95 percent of them went that way last year. Maybe the same—or a better—percentage will be rung up this year.

But the percentages aren't really the thing. What matters is caring, participating. And you can do that easily through the Company's payroll deduction plan. Just a little bit from you, added to "the little bit" that thousands and thousands of other Long Islanders contribute, could help meet the \$3 million target set for this year.

That money will be put to good use in 19 voluntary Long Island hospitals and 62 community service agencies. The dollars are spread around: the handicapped, retarded children assistance, Boy Scouts and Girl Scouts, Jewish Community Services, Catholic Charities. . . . The list goes on and on, just as the need keeps growing. After all, Nassau-Suffolk population is on the rise and has been for many years.

Were it not for the United Fund, the appeals for help would be coming from all angles, and the accounting job would be horrendous (unless you're the type who enjoys that kind of thing). Bundling it all in one package on a payroll deduction plan is just about the essence of ease.

So it all boils down to a simple question: Do you really want to help? On top of convenience, there's the possibility of a "bonus" for you: When you sign up you'll get a ticket stub, and if that stub is one of the ones drawn, you may get in on a prize. The first 16 prizes will be for Grummanites who have pledged a full share. Any member of the Company who contributes to the Fund will be eligible for the remaining eight prizes—and that includes plants off Long Island.

Prize list

1. Magnavox 25-inch stereo color TV combination with one year service
2. G.E. 24-cubic-foot refrigerator with ice maker and ice crusher
3. Sylvania 25-inch color console TV with one year service
4. G.E. Americana range or Caloric gas range
5. G.E. 25-inch color console TV with one year service
6. RCA 23-inch color console TV with one year service
7. Westinghouse side-by-side refrigerator-freezer
8. Sylvania stereo console AM/FM
9. Magnavox 19-inch wood color TV with matching stand
10. Sylvania 18-inch portable color TV
11. Frigidaire Skinny-Mini combination Washer-Dryer
12. Sony AM/FM stereo component system
13. G.E. 18-cubic-foot frost-free refrigerator
14. Caloric gas range
15. G.E. 16-pound automatic washer
16. Magnavox stereo component system, AM-FM stereo amplifier, record changer, speakers
17. G.E. undercounter dishwasher
18. G.E. upright freezer
19. G.E. stereo component system
20. Whirlpool automatic washer
21. G.E. electric 30-inch range
22. G.E. Port-a-color TV
23. Polaroid camera outfit #360
24. G.E. 23-inch black & white console TV
25. G.E. 23-inch black & white table model TV on stand
26. Westinghouse automatic clothes dryer
27. G.E. portable dishwasher
28. 16-inch portable black & white TV with stand



Where there is love. . . . This young lady carries the message 'I love you' on her cast for all to see. She and other children like her at St. Charles Hospital benefit from your contribution to the United Fund.



Caring is giving. Sometimes our concern for people who have big troubles (even little people like these tykes at St. Charles) can best be expressed by supporting the United Fund. (Photos by Nat Scherer)

plane GRUMMAN news

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Editor
Brian Masterson

Associate Editors
Claire Imrie
Al Wehren

Ads, Distribution
Dorothy Zeeb

Official Photographers
Presentations Services

Telephone
Plane News: 3293
Plane News from outside line:
LR 5-3293